

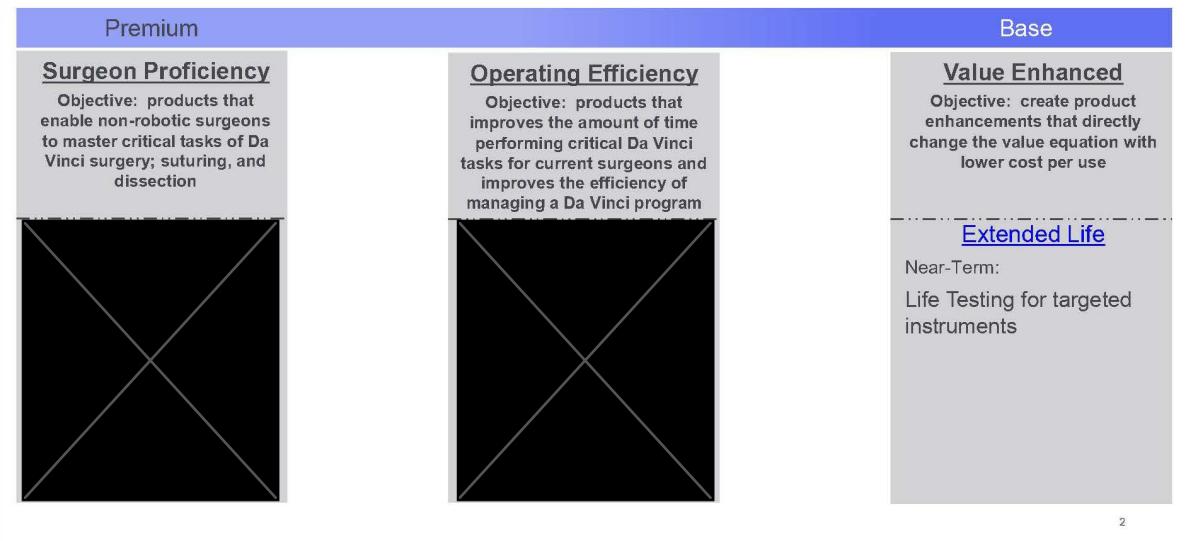
# Core Instrument Strategy

Extended Lives Narrative

09/05/19

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## Instruments Platforms for Core: 2019 - 2021



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## Extended Life Instruments: Needle Drivers, Graspers, Clip Appliers

### Value to ISI

1. Allows for a tiered price-per-use of instruments based on stresses on the device under normal use
2. Reduces the number of instruments built on an annual basis



### Value to Customer

1. Lowers price-per-use for common core instruments
2. Reduces the frequency of reorders for common core instruments
3. Reduces waste, increases efficiency



### Competitive Positioning

1. Value based category of instrumentation in common Da Vinci surgeries
2. Further defends price position from competitive entry



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## ***Cumulative Design Improvements to increase instrument life***

### **How can you increase instrument lives and reprocessing cycles on certain core instruments?**

In an effort to continuously improve instrument reliability and cost efficiency, the da Vinci Instruments are designed with extended instrument lives to reduce price-per-use while maintaining expected performance characteristics over the life of the instrument.

#### **Enabling Improvements:**

- Cumulative design improvements
- Rigorous reprocessing testing

#### **Supporting Data:**

- Design improvement history
- Reprocessing guideline improvement
- Declining RMA rates across instrument family

Quadruple Aim			
Improved Patient Outcomes	Enhanced Patient Experience	Enhanced Provider Experience	Lower Total Cost of Care
Same performance	Same performance	Same performance	Reduced per procedure cost

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IMPROVE, TEST, COLLABORATE TO ENSURE MAX LONGEVITY

## Example: Pricing Overview

Lower price-per-use = lower procedural cost for the hospital

For example: Large Needle Driver

Price	Lives	Price-Per-Use
\$2,200	10	\$220



New Price	New Life Count	Price-Per-Use
\$3,960	20	\$198

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Manage perception of price increase;

## Procedure Kits: Non-Standardized Instruments

<b>Hernia (USD): Xi, 3-arm</b>	<b>Cholecystectomy (USD): Xi 4-arm</b>	<b>GYN-b (USD): Xi 3-arm</b>
MCS (\$340)	10 life Hook (\$200)	MCS (\$340)
15 life Force Bipolar (\$280)	15 life ProGrasp (\$180)	15 life Force Bipolar (\$280)
20 life Large ND (\$180)	200 fire M/L Clip Applier (\$10) x5	20 life Mega SCND (\$195)
	15 life Fenestrated Bipolar (\$220)	
Accys Total*: \$271	Accys Total: \$332	Accys Total*: \$271
Total dV I&A: \$1,071	Total dV I&A: \$982	Total dV I&A: \$1,086
<b>-10% discount**</b>	<b>-9% discount</b>	<b>-9% discount</b>

\* Includes 4<sup>th</sup> arm drape (inoperable) at \$10 \*\* As compared to Most Efficient Xi I&A choreography

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## Launch Considerations

Consider cadence of release (all at once, staggered, etc.)

Consider bundling concept (program approach):

- Republish reprocessing guidelines/ best practices
- Peel-pack emphasis/ options to supply
- Training

Consider launching extended life instruments with new visual brand language (2.0)?

- Provides visual identifier for 10 vs 20 life instruments
- Reduces confusion and burden of manual tracking of reprocessing cycles (if mixed inventory)

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Hard cut over to ext. lives – consider inventory consumption scenarios

## Questions?

Why now?

Cumulative/ historical RMA analysis combined with design and reprocessing improvements enables extension of lives.

Why is the instrument more expensive?

The price-per use of the instrument is reduced.

Why aren't all instruments receiving extended lives?

Instruments are chosen based on previously reviewed variables. Lives are determined by instrument action (cutting, clipping, grasping, etc.), reprocessing benchmarks (number of estimated cycles), and performance requirements (clinical task).

## Appendix

## Extended Life Core Instruments

### Project Pillars

- Increase number of lives for needle drivers, cold graspers and clip appliers
- Lower benign procedure prices where a single energy instrument is used

### Product Pillars

- Needle Drivers to 15 lives
- Cold Graspers to 20 lives
- Clip Appliers to 200 fires

DA VINCI XI ITEM CODE	NUMBER OF USES	INSTRUMENT NAME
<i>ENDOWRIST NEEDLE DRIVERS</i>		
470006	15	Large Needle Drive
470309	15	Mega* SutureCut™ Needle Driver
470296	15	Large SutureCut Needle Driver
470194	15	Mega Needle Driver
<i>ENDOWRIST GRASPERS</i>		
470093	20	ProGrasp™ Forceps
470207	20	Tenaculum Forceps
470347	20	Tip-Up Fenestrated Grasper
470048	10	Long Tip Forceps
470318	20	Small Grapto™ (Grasping Retractor)
470049	20	Cadiere Forceps
470190	20	Cobra Grasper
<i>CLIP APPLIERS</i>		
470230	1200	Large Clip Applier
470327	1200	Medium-Large Clip Applier
470401	1200	Small Clip Applier

## Financials

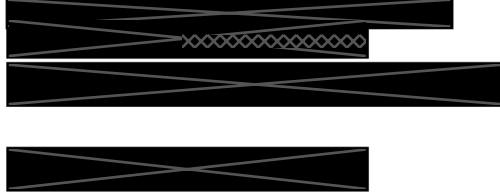
da Vinci Xi 8mm EndoWrist Instruments	Qty	Current Uses	Current Price	Price/ Use	New Uses	Discount	New Price	New Price / Use
470006-10 Large Needle Driver	1	10	\$ 2,200.00	\$ 220.00	20	10%	\$ 3,960.00	\$ 198.00
470309-11 Mega™ SutureCut™ Needle Driver	1	10	\$ 2,400.00	\$ 240.00	20	10%	\$ 4,320.00	\$ 216.00
470033-08 Black Diamond Micro Forceps	1	15	\$ 3,000.00	\$ 200.00	30	10%	\$ 5,400.00	\$ 180.00
470093-08 ProGrasp™ Forceps	1	10	\$ 2,200.00	\$ 220.00	20	10%	\$ 3,960.00	\$ 198.00
470207-08 Tenaculum Forceps	1	10	\$ 2,200.00	\$ 220.00	20	10%	\$ 3,960.00	\$ 198.00
470347-08 Tip-Up Fenestrated Grasper	1	10	\$ 2,200.00	\$ 220.00	20	10%	\$ 3,960.00	\$ 198.00
470181-08 Resano Forceps	1	10	\$ 2,200.00	\$ 220.00	20	10%	\$ 3,960.00	\$ 198.00
470318-08 Small Grapto™ (Grasping Retractor)	1	10	\$ 2,400.00	\$ 240.00	20	10%	\$ 4,320.00	\$ 216.00
470048-08 Long Tip Forceps	1	10	\$ 2,800.00	\$ 280.00	20	10%	\$ 5,040.00	\$ 252.00
470215-08 Cardiac Probe Grasper	1	10	\$ 2,400.00	\$ 240.00	20	10%	\$ 4,320.00	\$ 216.00
470230-09 Large Clip Applier	1	100	\$ 1,400.00	\$ 14.00	200	10%	\$ 2,520.00	\$ 12.60
470327-09 Medium-Large Clip Applier	1	100	\$ 1,400.00	\$ 14.00	200	10%	\$ 2,520.00	\$ 12.60
470249-08 Dual Blade Retractor	1	10	\$ 3,500.00	\$ 350.00	20	10%	\$ 6,300.00	\$ 315.00
470246-08 Atrial Retractor Short Right	1	10	\$ 3,500.00	\$ 350.00	20	10%	\$ 6,300.00	\$ 315.00
470001-08 Potts Scissors	1	10	\$ 1,950.00	\$ 195.00	20	10%	\$ 3,510.00	\$ 175.50
470007-04 Round Tip Scissors	1	10	\$ 2,035.00	\$ 203.50	20	10%	\$ 3,663.00	\$ 183.15
470049-04 Cadiere Forceps	1	10	\$ 2,100.00	\$ 210.00	20	10%	\$ 3,780.00	\$ 189.00
470296-04 Large SutureCut Needle Driver	1	10	\$ 2,400.00	\$ 240.00	20	10%	\$ 4,320.00	\$ 216.00
470194-04 Mega Needle Driver	1	10	\$ 2,200.00	\$ 220.00	20	10%	\$ 3,960.00	\$ 198.00
470190-03 Cobra Grasper	1	10	\$ 2,200.00	\$ 220.00	20	10%	\$ 3,960.00	\$ 198.00
470401-05 Small Clip Applier	1	100	\$ 2,800.00	\$ 28.00	200	10%	\$ 5,040.00	\$ 25.20
470036-03 Debakey Forceps	1	10	\$ 2,000.00	\$ 200.00	20	10%	\$ 3,600.00	\$ 180.00

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## Extended Life Instrument Reasoning

### Technical Improvements

- Xi & Si Instrument Grasper Family



### Reprocessing Improvements

Published Reprocessing Cycles in C&S Manual

- Improved instrument handling due to reprocessing limits
  - 1.5x reprocessing per instrument life
  - Gentler on instrument parts due to fewer processing cycles
- Published reprocessing guidelines (11/17 Xi; 2/18 Si)

Evidence:

1. RMA analysis for number of lives remaining
2. Peel packing study
3. Bench testing

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